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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/348,634	07/06/1999	YOUNG SIK YOUN	K-093	5523

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EXAMINER
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GESESSE, TILAHUN

ART UNIT	PAPER NUMBER
2684	17

DATE MAILED: 06/30/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/348,634

Applicant(s)

YOUN, YOUNG SIK

Examiner

Tilahun B Gesesse

Art Unit

2684

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 08 April 2004.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) 18-20 is/are withdrawn from consideration.
- 5) ☒ Claim(s) 21 is/are allowed.
- 6) ☒ Claim(s) 1-4, 6, 8-11 and 13-17 is/are rejected.
- 7) ☒ Claim(s) 5, 7, 12 and 22 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

**DETAILED ACTION**

1. This is in response to applicant's amendment and response filed April 8, 2004, in which claims 1-17 and 21-22 are pending.

***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-4,6,8-11,13-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lo (U.S. patent No. 5,166,929) in view of Tiedemann, Jr." (U.S. patent No. 5,604,730).

As to claims 1, 6,17, Lo discloses a method for performing a random access in a mobile communication system (abstract) comprising: monitoring at base station of a reverse common cahnnel (column 2 lines 38-54), determining state information of the reverse common channels corresponding to a result of the monitoring using one slot allocated to a forward common channel (column 2, line 55-66, column 3, lines 52-62 and figure 1) and broadcasting the state information to respective mobile stations through the forward common channel (column 2 line 67-column 3, line 3, column 3 lines 63-67 and figure 1).

Lo does not expressly disclose transmitting power control information to respective mobile staion. However, Tiedemann teaches transmitting power control

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information to mobile station (column 13 lines 8-11), further more, Tiedemann teaches transmission of power control bit along the messages (figure 7).

Since Lo, in the same field of endeavor, teaches signal power of the receive signal from the mobile station power compares and signal of lower power is discard (column 6, lines 18-23). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to combine Lo and Tiedemann, in monitoring power of the receive signals and generate power control, as taught by Tiedemann, in order to provide the power level of burst feedback for adjusting the mobile it's power level.

As to claims 2-3, Lo discloses the slot includes at least two channel information bits and one reservation control bit (figure 1) and bits are repeated with an old number of times (figure 1 and it's disclosure)

As to claim 4, Lo discloses the state information of the reverse common channel corresponding to the result of the monitoring determines one of a plurality of preset state information (FAA field and FM field, figure 1 and it's disclosure).

As to claim, 8, Lo does not expressly teach the base station determines the power control command before a starting point of each slot allocated to the reverse common channel.

However, Tiedemann teaches the base station communicating over a forward channel to a mobile radio to control the power of the mobile radio transmitting over the reverse channel to base staion (abstract).

Since Lo, in the same field of endeavor, teaches signal power of the receive signal from the mobile station power compares and signal of lower power is discard (column 6, lines 18-23). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to combine Lo and Tiedemann, in monitoring power of the receive signals and generate power control, as taught by Tiedemann, in order to command the level of power of the mobile radio in advance before power of the mobile radio wastes and causes interference.

As to claim 9, Lo discloses the base station matches periods of the reverse slots the mobile station uses to forward slots before using the reverse slot (column 4, lines 62-68, column 5, lines 23—51 and figure 2a).

As to claim 10, Lo discloses the base station feed back the state information continuously using a portion of broadcasting channel (column 5, lines 23—51 and figure 2a).

As to claim 11, Lo discloses receiving and analyzing at respective mobile station state information of the reverse common channel (column 6, lines 18-29), and performing at the respective mobile station a random access according to the state information (column 5, lines 23—51 and figure 2a).

As to claim 13, Lo discloses the mobile station does not change the transmission power for the idle state information occurred during performing random access (column 4, lines 14-27).

As to claim 14, Lo discloses determining a state of the reverse common channel through information contained in the next slot (column 5, lines 37-60 and figure 2a).

As to claims 15-16, Lo discloses determining a state of the reverse common channel if the reverse common channel is in a busy state, and the random access is performed improperly if the reverse common channel is in an idle state (column 1, line 52-column 2, line 3).

***Allowable Subject Matter***

4. Claims 5,7 and 12,22 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter: The prior art fails to teach busy-down state information representing both a state in which the reverse common channel is in a busy state and a command for reducing a transmission power to the mobile station and busy-up state information representing both a state in which the reverse common channel is in a busy state and a command for boosting a transmission power to the mobile station. These limitations, in conjunction with all limitations of the independent claims have not been disclosed, taught or made obvious over the prior art of record.

Claim 21 is allowed over the prior art. The following is an examiner's statement of reasons for allowance: the prior art does not teach the message transmission is topped if two idle state slots are detected by the mobile station in successive as a result of monitoring the next slot after transmission of a message through an arbitrary slot for performing random access. These limitations, in conjunction with all limitations of the

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independent claims have not been disclosed, taught or made obvious over the prior art of record.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

***Response to Arguments***

4 On page 8, third paragraph of response, applicant argued that Lo in view of Tiedemann, Jr. do not teach the method of transmitting two types of information (a state of a reverse common channel and power control information) on a forward common channel.

The examiner disagrees. Lo teaches monitoring multiple mobile terminals random accessing using reverse channel and base station broadcasts the status of multiple access setup channel to all the mobiles communicating with base periodically. A busy/idle bit inserted every 11 bits in the base to mobile transmission indicates if the mobile terminal to base station multiple access channel was busy or idle in the last period (column 1, lines 53-67). In addition to Lo's teachings, Tiedemann, Jr. also teaches base station transmits forward cdma channel divided into plurality of information slots and each slot includes data packet and mobile power control bit (see figure 7 of Tiedemann, Jr.).

To sum up, In view of the recite teaching of the prior art and response to applicant's argument, the claims subject matter renders obviousness or not patentable over the applied prior art.

***Conclusion***

5. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

1. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Hamalianen et al (5,802,465) discloses the bit configuration illustrating the full rate channel and control channel FACCH associated the time advance TA and power control are transmitted to these being necessary data for the mobile station (column 13 lines 1-11).



Kay et al (5,357, 513) discloses an adjustment request regarding the power with and the power transmission in response to the request is measured (abstract).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tilahun B Gesesse whose telephone number is 703-308-5873. The examiner can normally be reached on flex.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nay Maung can be reached on 703-308-7745. The fax phone number for the organization where this application or proceeding is assigned is 703-308-6306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-306-0377.

TBG

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June 24, 2004

  
**TILAHUN GESESSE**  
**PATENT EXAMINER**